Damage Control Overview

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Quiz

1. *List the 3 Material Readiness Conditions*

2. *What is the purpose of DCC*

3. *List 3 fire fighting agents*

4. *Your bulkhead is weakened during a huricane. To prevent it from collapsing and the ship flooding, WHAT WILL YOU USE TO SUPPORT THE BULKHEAD?*

Learning Objectives

- *Know (identify) the requirements for looking ahead in shipboard damage control training and preparedness.*
- *Know (identify) the typical shipboard damage control organization and the responsibilities of key personnel assigned.*
- *Know (identify) how shipboard watertight integrity is obtained through installed features to increase material conditions of readiness.*

Learning Objectives

- *Know (recall) the various conditions of readiness.*
- *Know (describe) the importance of preventive damage control.*

WHY ?

Big Flick DC Overview

- *Ships at sea are isolated from shore help and usually help from other ships; therefore, the crew must be capable of handling any damage the ship may encounter.*

Damage control is a 3-phase activity:

- *Prevent the damage*
- *Minimize the effects of damage*
- *Restore the ship to an effective fighting unit*

Effective damage control requires:

- *Organization*
- *Education*
- *Training*
- *Maintenance of equipment*
  - *Ninety percent of the damage control needed to save a ship takes place before the damage occurs.*
  - *Damage control is an all-hands evolution. The crew must be capable of handling damage because there is no place to go at sea. Everyone on a ship must be general damage control qualified and train regularly.*

Damage Control Organization

POSITION/COC	LOCATION
CO	CIC/Bridge
CHENG (DC Officer)	Main Control
DC Assistant	DC Central
Locker Officers/Leaders	Repair Locker
Scene Leaders	Scene of damage
Hose teams	Scene of damage

Repair parties

- *The larger the ship the greater the number of repair parties.*

REPAIR PARTY	*LOCATION*
Repair 2	*Forward repair*
Repair 3	*After repair*
Repair 5	*Propulsion repair*

Compartmentation

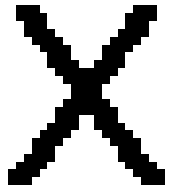
- *Navy ships are extensively compartmented. This compartmentation acts as a barrier to fires and flooding and prevents further damage. Navy ships are built to withstand the solid flooding of a certain number of compartments without sinking. This passive defense is surrendered if watertight integrity is not maintained through training and repair. Watertight doors and hatches must be maintained and closed properly.*

Material condition of readiness

- *Explains which doors, hatches and fittings are permitted open (the ship's level of watertight integrity).*

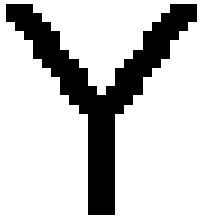
Material condition of readiness

- *X-ray (X): Provides the least protection and is set when there is no danger of attack or damage. All fittings marked with a black "X" shall be closed.*



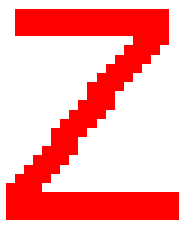
Material condition of readiness

- *Yoke (Y): Set and maintained at sea and in port during wartime or outside normal working hours. All fittings marked with a black "Y" shall be closed in addition to all "X" fittings.*



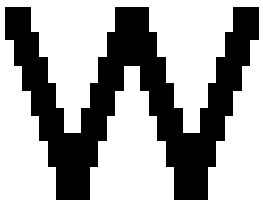
Material condition of readiness

- *Zebra (Z): Set during general quarters; provides the maximum protection for the ship and personnel in battle and emergency situations. All fittings marked with a red "Z" shall be closed, in addition to those marked with an "X" and "Y."*



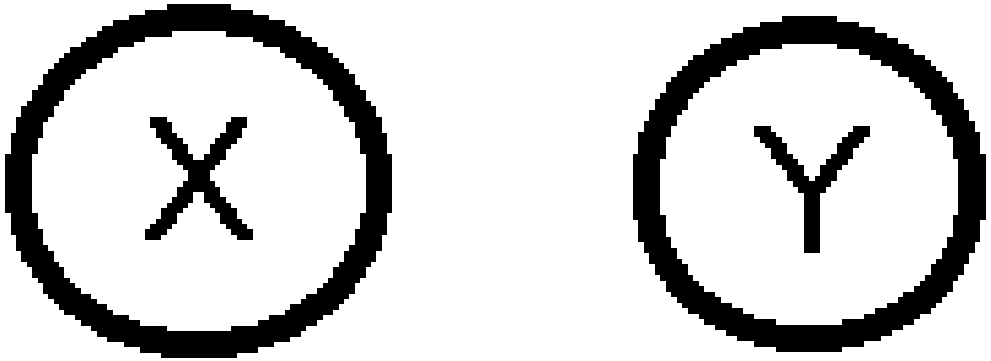
Special classifications

- *William (W): Sea suction valves and fittings which serve vital systems' cooling water, and other fittings and equipment necessary for fire protection and mobility. They are closed only to prevent further damage.*



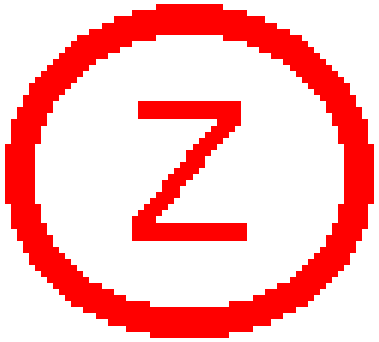
Special classifications

- *Circle X and Circle Y: Letter within a black circle. Signifies that may be opened without special permission, but must be secured immediately after use*



Special classifications

- *Circle Z: Letter within a red circle. May be opened with permission of the CO during general quarters for the comfort of the crew. Guarded when opened for immediate closure, if necessary*



Special classifications

- *Circle W: Letter within a black circle. Signifies ventilation fittings that are normally open and operating, but may have to be closed to prevent contamination from CBR attack or smoke. When closed, the habitability of the ship decreases rapidly. Should be closed for ort periods*

Special classifications

- *Dog Z: Fittings marked with a red "Z" inside a black "D" are closed to darken the ship. (Accesses to weather decks not equipped with light traps or door switches; porthole covers, etc.)*

All Hands

- *It is the responsibility of all hands to maintain the material condition in effect. If it is necessary to break the condition, permission must be obtained (from OOD or DCC). A DC closure log is maintained in DCC at all times.*

COMPARTMENT CHECKOFF LIST

NAVSHIPS 9880/2 (REV. 2-67) (Formerly NAVSHIPS 184) S/N 0105-530-2000

COMP'T. NO. 2-108-1-L NAME Crew's Berthing

ITEM	FITTING	NUMBER	LOCATION & PURPOSE	CLASS	DIV RESP
	ACCESS				
1.	QAWTD	2-108-1	Access to 2-96-1-L	Z	REP III
2.	WTD	2-108-3	Access to 2-120-1	Z	REP III
3.	WTH	2-120-3	Access to 3-108-1-L	X	S
	MISCELLANEOUS CLOSURES				
4.	ATC	2-109-1	in WTD 2-108	X	E
	DRAINAGE				
5.	DDV	2-112-1		Z	E
	FIREMAIN, SPRINKLING, AND WASHDOWN				
6.	FMCOV	2-109-1	Cut out to FP 2-	W	REP III
7.	FMCOV	2-109-1	Cut out to	W	REP III
	FUEL OIL				
8.	STC	2-118-1	Sound FO Tank	X	B
	JP-5				
9.	STC	2-118-1	Sound JP-5	X	B
	VENTILATION				
10.	EVC	2-113-1	For Exhaust	Z	REP III
	MISCELLANEOUS				
11.	Loud Speaker		1MC system		
12.	151b CO_2		Portable		

ompartment Checkoff List

Reading

- *Introduction to Naval Engineering*
  - *Chapter 26*
- *Naval Orientation*
  - *Chapter 17, pp. 9-12*
- *The Bluejackets' Manual*
  - *pp. 399-422*
- ***BRING PRINC. OF NAVAL ENG TUE!!!!!***